## SEQUENCE LISTING

<11		Breti Fox, Allis	Jud:	ith A		lward	i									
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gtt Val	tcc Ser	gga Gly	ggt Gly 20	gat Asp	gtt Val	gtg Val	gtg Val	act Thr 25	caa Gln	act Thr	cca Pro	ctc Leu	tcc Ser 30	ctg Leu	cct Pro	96
gtc Val	agc Ser	ttt Phe 35	gga Gly	gat Asp	caa Gln	gtt Val	tct Ser 40	atc Ile	tct Ser	tgc Cys	agg Arg	tct Ser 45	agt Ser	cag Gln	agt Ser	144
ctt Leu	gca Ala 50	aag Lys	agt Ser	tat Tyr	gly ggg	aac Asn 55	acc Thr	tat Tyr	ttg Leu	tct Ser	tgg Trp 60	tac Tyr	ctg Leu	cac His	aag Lys	192
cct Pro 65	ggc Gly	cag Gln	tct Ser	cca Pro	cag Gln 70	ctc Leu	ctc Leu	atc Ile	tat Tyr	999 Gly 75	att Ile	tcc Ser	aac Asn	aga Arg	ttt Phe 80	240
tct Ser	gly aaa	gtg Val	cca Pro	gac Asp 85	agg Arg	ttc Phe	agt Ser	ggc Gly	agt Ser 90	ggt Gly	tca Ser	gly aaa	aca Thr	gat Asp 95	ttc Phe	288
aca Thr	ctc Leu	aag Lys	atc Ile 100	agc Ser	aca Thr	ata Ile	aag Lys	cct Pro 105	gag Glu	gac Asp	ttg Leu	gga Gly	atg Met 110	tat Tyr	tac Tyr	336

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tgc tta caa ggt aca cat cag ccg tac acg ttc gga ggg ggg acc aag
                                                                     384
Cys Leu Gln Gly Thr His Gln Pro Tyr Thr Phe Gly Gly Gly Thr Lys
                              120
                                                  125
 ctg gaa ata aaa
                                                                     396
 Leu Glu Ile Lys
     130
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<221> SITE
<222> (21) ... (43)
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<222> (60)...(74)
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<222> (114)...(122)
<223> CDR3
<221> SITE
<222> (123)...(132)
<223> framework 4
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Val Ser Gly Gly Asp Val Val Val Thr Gln Thr Pro Leu Ser Leu Pro
            20
Val Ser Phe Gly Asp Gln Val Ser Ile Ser Cys Arg Ser Ser Gln Ser
                                                 45
Leu Ala Lys Ser Tyr Gly Asn Thr Tyr Leu Ser Trp Tyr Leu His Lys
                        55
                                             60
Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Gly Ile Ser Asn Arg Phe
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Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe

85 Thr Leu Lys Ile Ser Thr Ile Lys Pro Glu Asp Leu Gly Met Tyr Tyr 100 105 Cys Leu Gln Gly Thr His Gln Pro Tyr Thr Phe Gly Gly Gly Thr Lys 115 Leu Glu Ile Lys 130 <210> 3 <211> 420 <212> DNA <213> Mus musculus <220> <221> CDS <222> (1) ... (420) <400> 3 atg gga tgg agc tgt atc atc ctc ttc ttg gta tca aca gct aca agt Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ser Thr Ala Thr Ser gtc cac tcc cag gtc caa ctg cag cat ggg gct gag ctt gtg aag Val His Ser Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys eet ggg aet tea gtg aag etg tee tge aag ggt tat gge tae aee tte Pro Gly Thr Ser Val Lys Leu Ser Cys Lys Gly Tyr Gly Tyr Thr Phe acc agc tac tgg atg cac tgg gtg aag cag agg cct gga caa ggc ctt 192 Thr Ser Tyr Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu gag tgg atc gga gag att gat cct tct gag agt aat act aac tac aat 240 Glu Trp Ile Gly Glu Ile Asp Pro Ser Glu Ser Asn Thr Asn Tyr Asn caa aaa ttc aag ggc aag gcc aca ttg act gta gac att tcc tcc agc 288 Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Ile Ser Ser Ser aca gcc tac atg cag ctc agc agc ctg aca tct gag gac tct gcg gtc 336 Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val 100 tac tat tgt gca aga ggg ggt tac gac gga tgg gac tat gct att gac Tyr Tyr Cys Ala Arg Gly Gly Tyr Asp Gly Trp Asp Tyr Ala Ile Asp tac tgg ggt caa ggc acc tca gtc acc gtc tcc tca 420 Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser 130

<210> 4 <211> 140

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. <222> (55)...(68)
 <223> framework 2
<221> SITE
 <222> (69)...(85)
 <223> CDR2
<221> SITE
<222> (86)...(117)
<223> framework 3
<221> SITE
<222> (118)...(129)
<223> CDR3
<221> SITE
<222> (130)...(140)
<223> framework 4
<400> 4
Met Gly Trp Ser Cys Ile Ile Leu Phe Leu Val Ser Thr Ala Thr Ser
                 5
                                     10
Val His Ser Gln Val Gln Leu Gln Gln Pro Gly Ala Glu Leu Val Lys
Pro Gly Thr Ser Val Lys Leu Ser Cys Lys Gly Tyr Gly Tyr Thr Phe
Thr Ser Tyr Trp Met His Trp Val Lys Gln Arg Pro Gly Gln Gly Leu
                         55
Glu Trp Ile Gly Glu Ile Asp Pro Ser Glu Ser Asn Thr Asn Tyr Asn
                    70
                                         75
Gln Lys Phe Lys Gly Lys Ala Thr Leu Thr Val Asp Ile Ser Ser Ser
                                     90
Thr Ala Tyr Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val
            100
                                 105
                                                     110
Tyr Tyr Cys Ala Arg Gly Gly Tyr Asp Gly Trp Asp Tyr Ala Ile Asp
     115
                            120
                                                 125
Tyr Trp Gly Gln Gly Thr Ser Val Thr Val Ser Ser
    130
                         135
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<210> 5 <211> 540

<212> DNA <213> Artificial Sequence																
<220> <223> Portion of the heavy chain of LDP-02 with a heavy chain signal peptide																
<221> CDS <222> (1)(540)																
atg	00> 5 g aaa : Lys	tgc	acc Thr	tgg Trp 5	gtc Val	att Ile	ctc Leu	ttc Phe	ttg Leu 10	ı Val	tca Ser	aca Thr	gct Ala	aca Thi	agt Ser	48
gto Val	cac His	tcc Ser	cag Gln 20	. Val	caa Gln	cta Leu	gtg Val	cag Gln 25	Ser	ggg Gly	gct Ala	gag Glu	gtt Val	. Lys	aag Lys	96
cct Pro	ggg Gly	gct Ala 35	tca Ser	gtg Val	aag Lys	gtg Val	tcc Ser 40	tgc Cys	aag Lys	ggt Gly	tct Ser	ggc Gly 45	tac Tyr	acc Thr	ttc Phe	144
acc Thr	agc Ser 50	Tyr	tgg Trp	atg Met	cat His	tgg Trp 55	gtg Val	agg Arg	cag Gln	gcg Ala	cct Pro 60	ggc	caa Gln	cgt Arg	cta Leu	192
gag Glu 65	tgg Trp	atc Ile	gga Gly	gag Glu	att Ile 70	gat Asp	cct Pro	tct Ser	gag Glu	agt Ser 75	aat Asn	act Thr	aac Asn	tac Tyr	aat Asn 80	240
caa Gln	aaa Lys	ttc Phe	aag Lys	gga Gly 85	cgc Arg	gtc Val	aca Thr	ttg Leu	act Thr 90	gta Val	gac Asp	att Ile	tcc Ser	gct Ala 95	agc Ser	288
aca Thr	gcc Ala	tac Tyr	atg Met 100	gag Glu	ctc Leu	agc Ser	agc Ser	ctg Leu 105	aga Arg	tct Ser	gag Glu	gac Asp	act Thr 110	gcg Ala	gtc Val	336
tac Tyr	tat Tyr	tgt Cys 115	gca Ala	aga Arg	gly ggg	ggt Gly	tac Tyr 120	gac Asp	gga Gly	tgg Trp	gac Asp	tat Tyr 125	gct Ala	att Ile	gac Asp	384
tac Tyr	tgg Trp 130	ggt Gly	caa Gln	ggc Gly	acc Thr	ctg Leu 135	gtc Val	acc Thr	gtc Val	tcc Ser	tca Ser 140	gcc Ala	tcc Ser	acc Thr	aag Lys	432
ggc Gly 145	cca Pro	tcg Ser	gtc Val	ttc Phe	ccc Pro 150	ctg Leu	gca Ala	ccc Pro	tcc Ser	tcc Ser 155	aag Lys	agc Ser	acc Thr	tct Ser	999 160	480
ggc Gly	aca Thr	gcg Ala	gcc Ala	ctg Leu 165	ggc Gly	tgc Cys	ctg Leu	Val	aag Lys 170	gac Asp	tac Tyr	ttc Phe	ccc Pro	gaa Glu 175	ccg Pro -	528
gtg Val	acg Thr	gtg Val	tcg Ser 180													540

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<210> 6
 <211> 180
 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Portion of the heavy chain of LDP-02 with a heavy
       chain signal peptide
 <221> SITE
<222> (19)...(20)
 <223> signal peptide cleavage site
<400> 6
Met Lys Cys Thr Trp Val Ile Leu Phe Leu Val Ser Thr Ala Thr Ser
Val His Ser Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys
                                 25
Pro Gly Ala Ser Val Lys Val Ser Cys Lys Gly Ser Gly Tyr Thr Phe
                             40
Thr Ser Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Arg Leu
                         55
Glu Trp Ile Gly Glu Ile Asp Pro Ser Glu Ser Asn Thr Asn Tyr Asn
                     70
Gln Lys Phe Lys Gly Arg Val Thr Leu Thr Val Asp Ile Ser Ala Ser
                85
                                     90
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val
            100
                                 105
Tyr Tyr Cys Ala Arg Gly Gly Tyr Asp Gly Trp Asp Tyr Ala Ile Asp
                             120
                                                 125
Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Ala Ser Thr Lys
                        135
                                             140
Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser Lys Ser Thr Ser Gly
                 , 150
Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp Tyr Phe Pro Glu Pro
                                     170
Val Thr Val Ser
            180
<210> 7
<211> 413
<212> DNA
<213> Artificial Sequence
<220>
<223> Portion of the light chain LDP-02 with a light
      chain signal peptide
<221> CDS
<222> (1) ... (413)
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gatgttgtga tgactcaaag tccactctcc ctgcctgtca cccctggaga accagcttct 120
atctcttgca ggtctagtca gagtcttgca aagagttatg ggaacaccta tttgtcttgg 180
tacctgcaga agcctggcca gtctccacag ctcctcatct atgggatttc caacagattt 240
tctggggtgc cagacaggtt cagtggcagt ggttcaggga cagatttcac actcaagatc 300
tcgcgagtag aggctgagga cgtgggagtg tattactgct tacaaggtac acatcagccg 360
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tacacgttcg gacaggggac caaggtggaa ataaaacggg ctgatgcggc gcc
                                                                    413
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 <211> 138
 <212> PRT
 <213> Artificial Sequence
<220>
 <223> Portion of the light chain of LDP-02 with a light
      chain signal peptide
<221> SITE
<222> (20)...(21)
<223> signal peptide cleavage site
<400> 8
Met Lys Leu Pro Val Arg Leu Leu Val Leu Leu Phe Trp Ile Pro
                                     10
Val Ser Gly Gly Asp Val Val Met Thr Gln Ser Pro Leu Ser Leu Pro
            2.0
                                 25
Val Thr Pro Gly Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser
                                                 45
Leu Ala Lys Ser Tyr Gly Asn Thr Tyr Leu Ser Trp Tyr Leu Gln Lys
                        55
Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Gly Ile Ser Asn Arg Phe
                    70
Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe
                85
                                     90
Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr
            100
                                105
Cys Leu Gln Gly Thr His Gln Pro Tyr Thr Phe Gly Gln Gly Thr Lys
       115
                            120
Val Glu Ile Lys Arg Ala Asp Ala Ala Pro
                        135
<210> 9
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<213> Mus musculus
<220>
<221> SITE
<222> (1)...(16)
<223> CDR1 of the light chain of antibodies Act-1 and
     LDP-02
<400> 9
Arg Ser Ser Gln Ser Leu Ala Lys Ser Tyr Gly Asn Thr Tyr Leu Ser
                                    10
<210> 10
<211> 7
<212> PRT
<213> Mus musculus
<220>
<221> SITE
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<222> (1)...(7)
 <223> CDR2 of the light chain of antibodies Act-1 and
       LDP-02
 <400> 10
 Gly Ile Ser Asn Arg Phe Ser
                  5
<210> 11
<211> 9
<212> PRT
<213> Mus musculus
<220>
<221> SITE
<222> (1) ...(9)
<223> CDR3 of the light chain of antibodies Act-1 and
      LDP-02
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Leu Gln Gly Thr His Gln Pro Tyr Thr
                  5
<210> 12
<211> 5
<212> PRT
<213> Mus musculus
<220>
<221> SITE
<222> (1)...(5)
<223> CDR1 of the heavy chain of antibodies Act-1 and
      LDP-02
<400> 12
Ser Tyr Trp Met His
                 5
<210> 13
<211> 17
<212> PRT
<213> Mus musculus
<220>
<221> SITE
<222> (1) ... (17)
<223> CDR2 of the heavy chain of antibodies Act-1 and
      LDP-02
<400> 13
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1
                                     10
                                                          15
Gly
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<210> 14
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<212> PRT
<213> Mus musculus
<220>
<221> SITE
<222> (1)...(12)
<223> CDR3 of the heavy chain of antibodies Act-1 and
      LDP-02
<400> 14
Gly Gly Tyr Asp Gly Trp Asp Tyr Ala Ile Asp Tyr
<210> 15
<211> 396
<212> DNA
<213> Mus musculus
<400> 15
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gtaatacatt cccaagteet caggetttat tgtgetgate ttgagtgtga aatetgteec 120
tgaaccactg ccactgaacc tgtctggcac cccagaaaat ctgttggaaa tcccatagat 180
gaggagctgt ggagactggc caggcttgtg caggtaccaa gacaaatagg tgttcccata 240
actctttgca agactctgac tagacctgca agagatagaa acttgatctc caaagctgac 300
aggcagggag agtggagttt gagtcaccac aacatcacct ccggaaacag gaatccagaa 360
caacagaagc accaacagcc taacaggcaa cttcat
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catgtaggct gtgctggagg aaatgtctac agtcaatgtg gccttgccct tgaatttttg 180
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ggacagette actgaagtee caggetteac aageteagee ceaggetget geagttggac 360
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